This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A method for smelting non-ferrous metal sulphides in a suspension smelting furnace, to produce ~~in which~~ matte ~~is produced~~ with a high non-ferrous metal content and disposable slag, ~~which is reduced with the aid of carbonaceous material in a lower furnace for disposal,~~ the method comprising:

injecting a carbonaceous chemical reducing agent for chemically reducing slag ~~characterized in that the slag is reduced in~~ into a throttle point ~~(5)~~ formed in ~~the~~ a lower furnace, in which throttle point the width and cross-sectional area of said furnace ~~is~~ are decreased, ~~and into which a~~ the chemical reducing agent ~~is charged~~ being injected, via tuyeres, ~~(6) on the~~ into a slag layer.

Claim 2. (currently amended) A method according to claim 1, ~~characterized in that~~ wherein the entire melt, including matte and slag, flows through the throttle point.

Claim 3. (currently amended) A method according to claim 1, ~~characterized in that~~ wherein the chemical reduction point is in the lower furnace in the area between the reaction shaft and uptake.

Claim 4. (currently amended) A method according to claim 1, ~~characterized in that the~~ wherein a chemical reduction point is in the area of the lower furnace after the uptake.

Claim 5. (currently amended) A method according to claim 11, ~~characterized in that~~ wherein the chemically reduced slag is ~~channelled~~ channeled to a settling area ~~(7)~~ before being discharged from the furnace.

Claim 6. (currently amended) Equipment for smelting non-ferrous metal sulphides in a suspension smelting furnace, producing matte with a high non-ferrous metal content and slag which is reduced for disposal, ~~characterized in that~~ the equipment comprising a smelting furnace having a reaction shaft, an uptake and a lower furnace which acts as a settler and is arranged below the reaction shaft and uptake, the lower furnace ~~is~~ being furnished with a throttle point having a reduced width and reduced cross-sectional area ~~(5)~~ and tuyeres ~~(6)~~ placed therein for introducing a chemical reducing agent.

Claim 7. (currently amended) Equipment according to claim 6, ~~characterized in that~~ wherein the throttle point is formed ~~to~~ in an area of the lower furnace between the reaction shaft and the uptake.

Claim 8. (currently amended) Equipment according to claim 6, ~~characterized in that~~ wherein the throttle point is formed ~~to~~ in an area of the lower furnace ~~after~~ on a side of the uptake which is opposite the reaction shaft.

Claim 9. (currently amended) Equipment according to claim 6, ~~characterized in that~~ wherein the lower furnace is furnished with a settling area after the throttle point.

Claim 10. (currently amended) Equipment according to claim 9, ~~characterized in that the~~ wherein a slag-tapping hole is located in said settling area.

Claim 11. (currently amended) Equipment according to claim 9, ~~characterized in that~~ wherein the width of the settling area is equal to that of the lower furnace.

Claim 12. (currently amended) Equipment according to claim 9, ~~characterized in that~~ wherein the width of the settling area is equal to that of the throttle point.